

REMARKS

Summary

Claims 1-14 were pending. Claims 1, 5, 8, and 13 have been rewritten and Claims 2-4, 6-7, 11-12, and 14 cancelled. Claims 1, 5, 8-10 and 13 are pending. No new matter has been added as a result of this amendment.

Rejection of Claims

Claims 1-2 were rejected under 35 U.S.C. 102(e) as being anticipated by Kawasaki (US PAP 2002/0008936); Claim 1 was rejected under 35 U.S.C. 102(e) as being anticipated by Dykes (US Pat. 6,586,069); Claims 2-7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Dykes; and Claims 8-11 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Huai (US Pat. 6,118,629) in view of Dykes. Claims 12 and 14 were objected to as being dependent on a rejected base claim, but would be allowable if rewritten in an independent form including all of the limitations of the base claim and any intervening claims.

Applicants have rewritten Claim 8 to incorporate the elements of Claims 11 and 12 and rewritten Claim 14 to incorporate the elements of Claim 13. Applicants have cancelled Claims 11-12, and 14.

Claim 1 has been rewritten and now recites that the soft magnetic film comprises $(Fe_xNi_y)_aRe_b$, $0.54 \leq x \leq 0.58$, $x+y=1$, where x and y are a mass percent ratio, and $0 < b \leq 10.1$, $a+b=100$, where a and b are mass percent. Such an arrangement permits simultaneous adjustment of both the resistivity and saturated magnetic flux density. None of the references anticipate the range recited, nor recognize the ability of the specific alloy and composition range to simultaneously adjust both the resistivity and saturated magnetic flux density.

The Examiner has indicated that it would be obvious to one of ordinary skill in the art to "routinely modify the magnetic head structure in the course of routine optimization/experimentation and thereby obtain various optimized

relationships including those set forth in Claims 2-7. Moreover, absent a showing of criticality (i.e. unobvious or unexpected results), the relationships set forth in Claims 2-7 are considered to be within the level of ordinary skill in the art..."

In *In re Aller* (220 F.2d, 454, 42 CCPA 824, 105 USPQ 233 (1955), the court held, "[g]enerally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." " *In re Aller* is a case in which the process in question was a matter of admitted prior art, and the issue was only one of whether the experimentation to find an optimum value was no more than the application of the expected skill of the chemical engineer.

While the courts have held that routine experimentation or optimization may not lead to patentable subject matter, however, the courts have also held that one exception is the case where a "parameter optimized was not recognized to be a result-effective variable" *In re Antonie*, 559 F.2d 618, 621, 195 USPQ 6, 8 (CCPA 1977). A result-effective is a variable which achieves a recognized result, before the determination of the optimum or workable ranges of the variable might be characterized as routine experimentation.

The situation in *In re Antonie* is similar to Claim 1 of the instant application, in which none of the references anticipate the range recited, nor recognize the ability of the specific alloy and composition range to simultaneously adjust both the resistivity and saturated magnetic flux density. For at least this reason, Claim 1 is patentable over the cited reference.

Conclusion

In view of the above, Applicants respectfully submit that all of the pending claims are in condition for allowance. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a

telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorney or agent.

Respectfully submitted,



Anthony P. Curtis, Ph.D.
Registration No. 46,193
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200